



2015 INDIANA DEER SEASON SUMMARY

Jim Mitchell Memoriam

The Indiana Division of Fish and Wildlife would like to dedicate the 2015 deer season summary in honor of Jim Mitchell, retired Indiana state deer biologist. Jim died March 11, 2016 of injuries sustained during a vehicular accident in Florida.

Jim earned a PhD in geology from Indiana University and was employed as an inspector for the Alaskan pipeline. He later completed post-doctoral work in wildlife at Colorado State University and then worked 11 years with the Nebraska Game and Parks Commission as their upland game manager. Jim was the Indiana DFW state deer biologist from September 1990 until his retirement in September 2008.

Jim's career in Indiana, consistent with most state deer biologists, was consumed with controversial issues. Jim always maintained a professional, science-based approach toward wildlife management despite the opposing political and populist forces. He worked tirelessly and remained humble about his accomplishments and successes that occurred during his tenure, many of which were ahead of their time, including: implementation of deer reduction hunts on state parks and a statewide deer reduction system, extending the muzzleloader season, addition of crossbows to the archery season, and introducing a youth deer season. In addition to those endeavors which took years to achieve, Jim fought endlessly to support deer hunting opportunities for all Hoosier citizens. He fought hard to ensure those opportunities were not lost to elitist groups or special hunting interests and was pleased that there were more days available to hunt when he retired than when he began.

A tribute to Jim would not be complete without mentioning that he was quite the mentor. Jim made himself available to the many beginning biologists that passed through the Bloomington DFW office. Jim will continue to be admired by his many friends and co-workers for his intelligence, science-based management, tenacity, and strength to endure years of endless public ridiculing that is, unfortunately, part of being a state deer biologist.

The Indiana DFW benefited tremendously from Jim's knowledge, passion and devotion to wildlife and his focus on a healthy deer population. His actions and abilities to manage conflicts associated with deer management will continue to have a positive effect not only in Indiana, but regionally as his mentorship is not limited by state boundaries.

“Examine each question in terms of what is ethically and aesthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

—Aldo Leopold

2015 Indiana Deer Harvest Summary

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Federal Aid in Wildlife Restoration Program

This program supports state fish and wildlife agencies to conserve, protect, and enhance fish, wildlife, their habitats, and the hunting, sport fishing and recreational boating opportunities they provide. This program was initiated in 1937 as the Federal Aid in Wildlife Act and created a system where by taxes are paid on firearms, ammunition and archery equipment by the public who hunts. Today this excise tax generates over a hundred million dollars each year that are dedicated to state wildlife restoration and management projects across the United States.



OVERVIEW OF THE HARVEST

The 2015 Indiana deer hunting season was composed of four statewide seasons: Youth (Sept. 26-27), Archery (Oct. 1 to Jan. 3), Firearms (Nov. 14-29), and Muzzleloader (Dec. 5-20). Licensed youth age 17 or younger were eligible to participate in the youth-only season if accompanied by an adult at least 18 years old. Youth could take multiple deer (one antlered deer and the number of bonus antlerless deer per county quota) during this season for the fourth consecutive year. In addition to the four statewide seasons, a Special Antlerless Firearms season was available from Dec. 26 to Jan. 3 in 60 counties, with additional date restrictions for counties with “A” designated quotas.

The statewide archery bag limit was two deer. Hunters could take one deer per license for a total of either two antlerless or one antlered and one antlerless deer. A hunter could take only one antlered deer during all four statewide seasons combined, (Archery, Firearms, Muzzleloader, and Youth season). Hunters were allowed to use crossbows throughout the archery season for the fourth year when in possession of a crossbow license. Any deer taken with a crossbow counted toward the hunter’s archery bag limit of two deer.

Hunters could harvest additional deer beyond the statewide bag limits in designated Deer Reduction Zones. Beginning with an antlerless deer, they were allowed to harvest up to ten additional deer under the Deer Reduction Zone bag limit, for a total of either ten antlerless or one antlered (“earn-a-buck”) and nine antlerless deer. Harvest of these additional deer required the possession of a Deer Reduction Zone license for each deer harvested. An antlered deer harvested under the Deer Reduction Zone license did not count toward a hunter’s statewide bag limit of one antlered deer. However, deer harvested in designated Deer Reduction Zones with other license types (e.g., archery, bonus antlerless, bundle) did count toward statewide bag limits.

The Deer Reduction Zone season opened Sept. 15th, two weeks prior to the beginning of Archery Season and continued through Jan. 31.

The bag limit during Firearms season was one antlered deer. The bag limit for Muzzleloader season was one deer of either sex (antlered deer were only allowed for hunters who had yet to satisfy their one antlered bag limit across all statewide seasons). A single firearms license was required to hunt with any combination of shotgun, muzzleloader, rifle, or handgun during Firearms season, and a muzzleloader license (separate from the firearms license) was required to hunt during Muzzleloader season.

Most resident deer licenses could be purchased for \$24, and nonresident licenses for \$150. This was the fourth year that the deer license bundle was available for purchase at \$65 for residents and \$295 for nonresidents. The deer license bundle, which is valid for all deer seasons except the Deer Reduction Zone season, allowed hunters the opportunity to take up to three deer while attempting to satisfy statewide bag limits for archery, firearms, muzzleloader, and special antlerless firearm seasons. The three deer could be either two antlerless and one antlered, or three antlerless deer. Resident landowners and leasees who worked Indiana farmland were exempt from possessing deer licenses when hunting on that land. Hunters were required to register all harvested deer through the online CheckIN Game system within 48 hours of the kill.

There were multiple reserve draw deer hunts open to hunters with a valid deer hunting license. The reserve draw locations change annually and included the following partial list of locations in 2015: Muscatatuck and Big Oaks National Wildlife Refuges, Camp Atterbury Joint Maneuver Training Center and the T.C. Steel State Historic Site. For a complete list of reserve draw deer hunts please visit the DNR website at <http://www.in.gov/dnr/fishwild/5834.htm>.

BONUS ANTLERLESS LICENSES

In addition to standard seasonal bag limits, hunters could purchase bonus antlerless licenses to take additional antlerless deer in any county. County bag limits (quotas) ranged from A to 8 (Figure 1). These licenses were valid for one antlerless deer and licensed deer hunters could purchase an unlimited number of bonus antlerless licenses as long as the county quotas were observed. These licenses could be used during any deer hunting season, using equipment legal for that season, except the Deer Reduction Zone Season. Bonus antlerless licenses could only be used in “A”-designated counties Nov. 26 – Jan. 3.

The first purchase of a bonus antlerless license cost \$24 for residents and \$150 for nonresidents. Purchase of any additional bonus antlerless licenses cost \$15 for residents and \$24 for nonresidents; this discount was not available for any other type of deer license.

DEER HARVESTED BY SEASON

A total of 123,664 harvested deer were reported in Indiana during the 2015 season (Figure 2). This harvest was 3% greater than the 120,073 deer taken during the 2014 season. The antlered deer harvest of 50,379 was 10% higher than the 45,686 reported in 2014. The antlerless harvest of 73,285 was 1% less than the 74,387 harvested in 2014. In 2015, the reported harvest for total deer ranks 10th all-time, while the total antlerless deer harvest ranks 11th highest in Indiana history. The antlered harvest ranks 8th highest since reporting began in 1951. Approximately 3.5 million deer have been reported harvested during the past 64 deer hunting seasons in Indiana.

All deer were checked in electronically for the 2015 season. Only 179 (less than 1%) hunters checked in via phone. The phone call-in system cost users \$3 per reported deer.

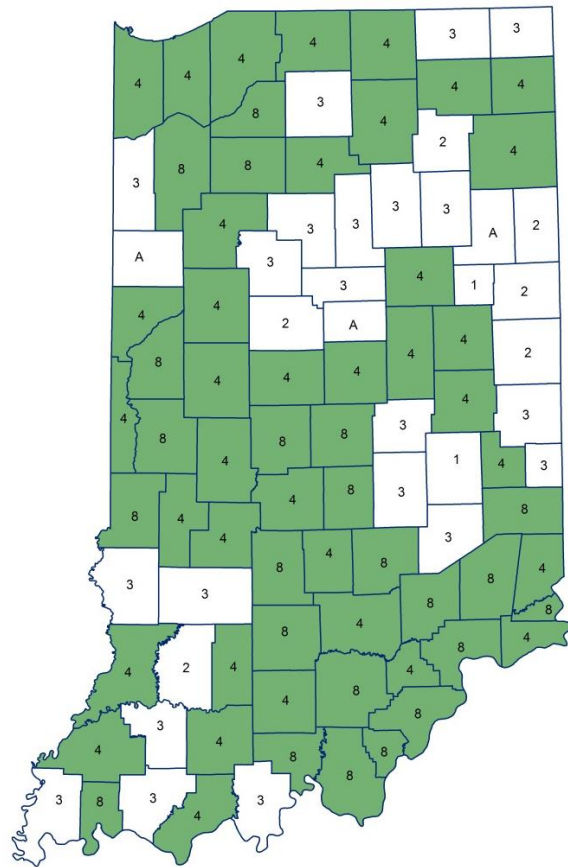


Figure 1. Bonus antlerless quotas for 2015. Shaded counties were eligible for the special antlerless firearms season.

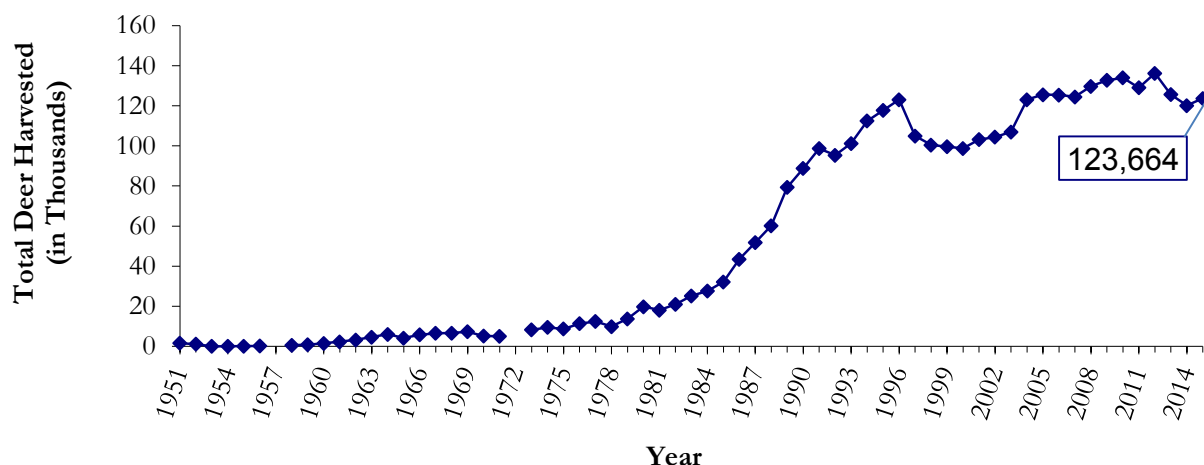


Figure 2. The total number of deer harvested in each Indiana deer season 1951-2015.

The 2015 hunting season began with the Deer Reduction Zone on Sept. 15 followed by a youth-only weekend (Sept. 26- 27). The number of deer harvested with archery equipment during the Deer Reduction Zone season was incorporated into the Archery Season, while deer harvested with firearms during the Deer Reduction Zone season was incorporated into the firearms season. The Youth season was created in 2006 and allowed youth age 15 and younger to harvest one antlerless deer. This was the sixth year youth could harvest an antlered deer and fourth year they could harvest more than one deer during the youth season. A total of 2,467 deer were reportedly harvested in 2015 during this season. The Youth season total, which included deer harvested by youth during the Deer Reduction Zone season, was a decrease of less than 1% from the 2,488 harvested in 2014. The youth season resulted in 2% of the total harvest (Table 1). Antlered bucks made up 30% of the harvest, while 11% was composed of button bucks (Figure 3).

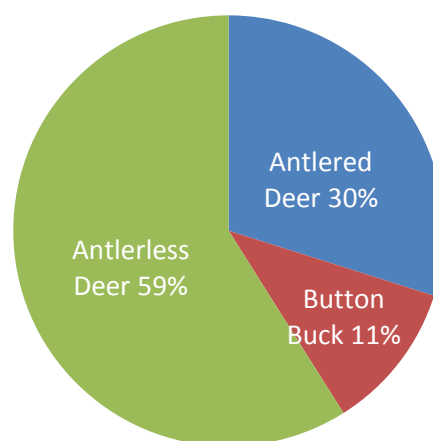


Figure 3. 2015 Youth season harvest composition.

Table 1. Number of deer harvested per season type during the 2015 Indiana deer hunting season. Values in parentheses represent percent of total harvest for each season type. Values may not total 100 due to rounding.

Season Type (Dates)	Number of deer harvested		
	Antlered [†]	Antlerless	Total
Youth Deer* (26 - 27 Sept)	737 (.6)	1,730 (1.4)	2,467 (2)
Archery* (1 Oct - 3 Jan)	11,421 (9)	21,332 (17)	32,753 (26)
Firearms* (14-29 Nov)	35,422 (29)	37,133 (30)	72,555 (59)
Muzzleloader (5 - 20 Dec)	2,777 (2)	8,007 (6)	10,784 (9)
Special Antlerless Firearms** (26 Dec - 3 Jan)	118 (.01)	4,987 (4)	5,105 (4)
Totals	50,475(41)	73,189 (59)	123,664
*Includes Deer Reduction Zones			**In 60 counties
			†Includes shed buck harvest

There were 32,753 deer harvested during the Archery season, which represented 26% of the overall harvest and was slightly less (5%) than the 34,600 harvested in 2014 (Table 1). Antlerless deer (n=21,332) made up 65% of the total archery harvest, (Figure 4).

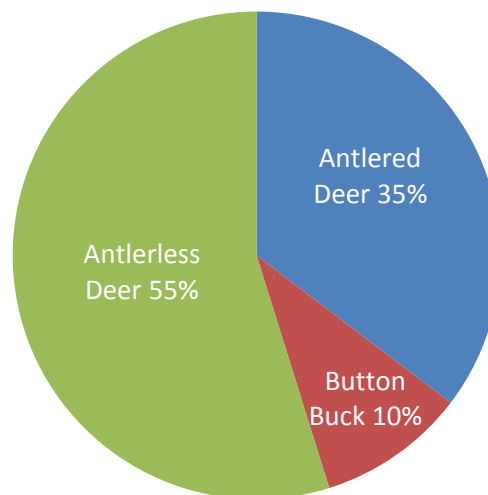


Figure 4. 2015 Archery harvest composition.

Table 2. Number of deer harvested on each day of the 2015 Indiana firearm season (includes deer taken by bow, crossbow, shotgun, handgun, rifle, and muzzleloader).

		Antlered		Antlerless		Total	
Date	Day	N	Daily %	N	Daily %	N	Total %
14 November	Sat	14,697	56%	11,341	44%	26,038	35%
15 November	Sun	6392	54%	5,466	46%	11,858	16%
16 November	Mon	2165	50%	2,195	50%	4,360	6%
17 November	Tue	890	48%	970	52%	1,860	2%
18 November	Wed	584	51%	560	49%	1,144	2%
19 November	Thu	1,187	50%	1,204	50%	2,391	3%
20 November	Fri	1,548	46%	1,800	54%	3,348	4%
21 November	Sat	2,250	46%	2,643	54%	4,893	7%
22 November	Sun	1,709	41%	2,497	59%	4,206	6%
23 November	Mon	685	37%	1,182	63%	1,867	2%
24 November	Tue	669	35%	1,228	65%	1,897	3%
25 November	Wed	851	37%	1,441	63%	2,292	3%
26 November	Thu	806	38%	1,332	62%	2,138	3%
27 November	Fri	555	35%	1,013	65%	1,568	2%
28 November	Sat	645	30%	1,471	70%	2,116	3%
29 November	Sun	911	31%	2,024	69%	2,935	4%
Totals		36,544		38,367		74,911	100%
% of Total Season Harvest (123,664)						61%	

The Firearms season (including firearms harvest from the Deer Reduction Zone) harvest was a 7% increase from the 67,989 deer harvested in 2014 and represented 59% of the total harvest (Table 1). The antlerless harvest of 29,969 deer was 22% less than the 2014 antlerless harvest of 38,666. The antlered harvest of 42,586 was 45% more than the antlered deer harvest in 2014 (29,323). The percentage of the antlered harvest exceeded the antlerless harvest on only 3 days of the firearms season (opening weekend and the fifth day) and equaled the antlerless harvest two additional days (third and sixth days). The antlerless deer harvest outnumbered antlered deer during the remaining 11 days

of the season (Table 2). During opening weekend 51% of the total Firearms season harvest occurred, similar to the 49% harvested during the 2014 season and 50% harvested during the 2012 season. The opening weekend total for the 2013 season was 33% of the season harvest, but the harvest during the second weekend of the 2013 season was greater (10%) compared to 2012, 2014 and 2015 (all 7%) seasons. Opening weekend contributed 31% of the statewide total harvest for all 2015 seasons, 12% more than the opening weekend harvest of 2014. Antlerless deer accounted for 41% (81% were does) of the Firearms Season harvest. (Figure5).

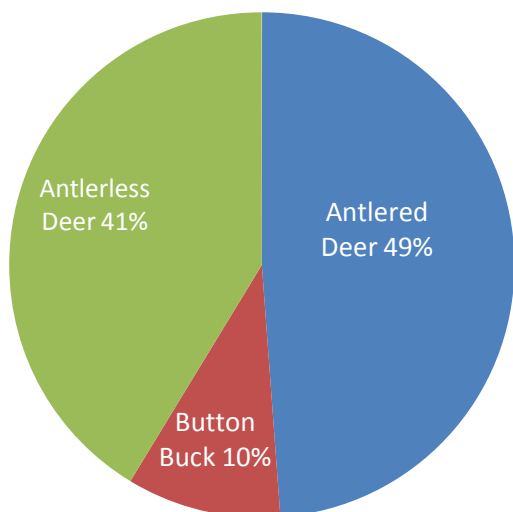


Figure 5. 2015 Firearm harvest composition.

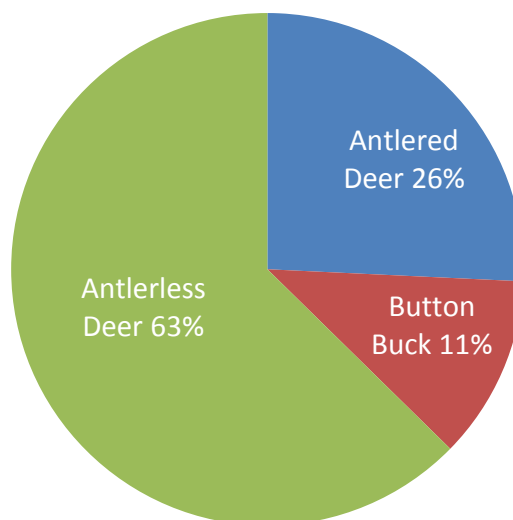


Figure 6. 2015 Muzzleloader harvest composition.

At 10,784 deer harvested, the Muzzleloader Season accounted for 9% of the total 2015 harvest (Table 1), which equaled the 2014 harvest. The Muzzleloader harvest was only marginally less than the 2014 harvest (10,825) and the percentage of antlerless deer harvested (74%) was equal to the 2014 season. (Figure 6).

The Special Antlerless Firearms Season was available for the fourth year in counties with a bonus county designation of four or more (Figure 1). A total of 60 counties met this criterion in 2015, a decrease from the 63 counties in 2014. The reported harvest during this season was 5,105 with 83% of the harvest reported as does (Figure 7). About 2% (n=118) of the antlerless harvest was reported as adult males who had shed their antlers.

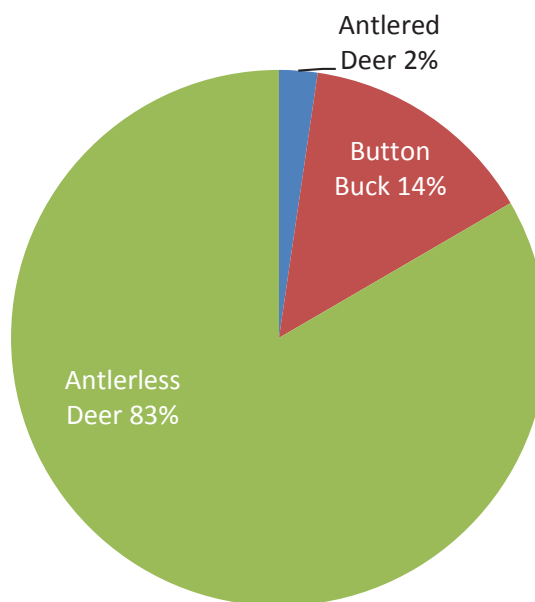


Figure 7. 2015 Special Antlerless Firearms harvest composition.

HARVEST BY EQUIPMENT TYPE

Six types of equipment were legal for hunting deer in 2015: archery (traditional and compound bows), crossbows, shotguns, muzzleloaders (both long guns and handguns), handguns, and rifles. Rifle cartridges were restricted to those with a bullet diameter of .357 or larger, and case length had to be between 1.16 and 1.8 inches. Harvest by equipment type is illustrated in Figure 8. Harvest increased from 2014 for all equipment types (Table 3) excluding bow, which declined by almost 10%. Shotgun harvest increased by approximately 3%, muzzleloader by 4%, handgun by 8%, rifle by 18% and crossbow by .7%. This was the fourth year that crossbows were allowed throughout Archery Season without restriction.

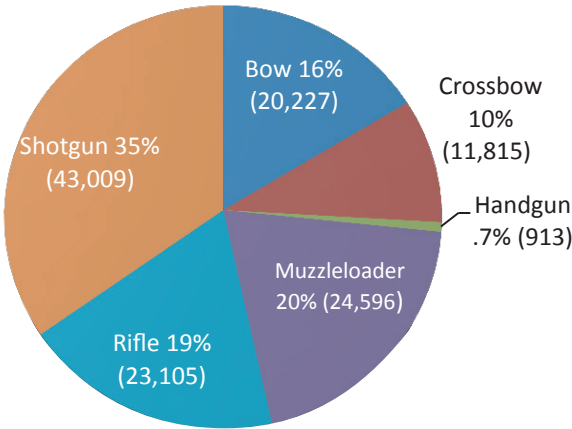


Figure 8. 2015 harvest by equipment type in Indiana.

Table 3. Number of deer harvested by type of legal hunting equipment between 2009-2015 seasons*. Approximate percent of total harvest shown in parentheses.							
Equipment	2009	2010	2011	2012	2013	2014	2015
Bow	28,497 (21)	27,186 (20)	26,715 (21)	27,580 (20)	24,288 (19)	22,375 (19)	20,227 (16)
Shotgun	65,839 (50)	61,920 (46)	54,683 (42)	51,815 (38)	46,458 (37)	41,947 (35)	43,009 (35)
Muzzleloader	32,745 (25)	33,527 (25)	33,571 (26)	29,488 (22)	24,935 (20)	23,657 (20)	24,596 (20)
Handgun	1,932 (1)	1,318 (1)	1,028 (1)	1,086 (1)	937 (1)	844 (1)	913 (.7)
Rifle	2,809 (2)	9,125 (7)	11,930 (9)	17,827 (13)	18,846 (15)	19,527 (16)	23,105 (19)
Crossbow	930 (1)	928 (1)	1,091 (1)	8,452 (6)	10,171 (8)	11,723 (10)	11,815 (10)
Total	132,752	134,004	129,018	136,248	125,635	120,073	123,664
*Values within this table do not exactly equal those tallied by season (Table 1) due to the fact that multiple equipment types can be used during the firearm season. Additionally, slight differences arise when partitioning harvest of unknown equipment type versus unknown season.							

HARVEST BY LICENSE STATUS

Licensed resident hunters (Lifetime, Resident, and Youth license holders) took 79% of the total deer harvested in 2015, while licensed nonresidents represented 9% of the total harvest (Table 4). Hunters who purchased regular annual deer hunting licenses (resident plus non-resident) took only 59% of the total deer harvest; other individuals using discounted licenses or exemptions (i.e., Lifetime license holders, Youth license holders, landowners/tenants, and active-duty military personnel) took 41% of the total harvest. Landowners and lessees who hunted on their own land without a license and military personnel on official leave status took 13% of the total deer harvest. Of the deer harvested by license-exempt hunters, 99% were harvested by landowners/tenants, while only 1% was harvested by military personnel on leave.

Table 4. Harvest distribution of deer by license type during 2015 hunting season.

License Status	Deer Harvested	Percent of Harvest
Resident	61,770	50
Lifetime	23,702	19
Land Owner	15,205	12
Youth	11,843	9.5
Nonresident	11,034	9
Military	110	0.08
Total	123,664	100

HARVEST AGE AND SEX STRUCTURE

The age and sex structure of the 2015 deer harvest was 41% adult males (antlered bucks), 49% adult females, and 10% male fawns (button bucks) (Table 5). Antlerless deer represent the highest proportion of the total deer harvest at 59%, but dropping from an all-time high of 66% in 2012. During the opening weekend of Firearms Season, DFW biologists have traditionally manned check stations throughout the state to collect age-structure data and tissue samples for disease testing. Prior to the 2012 deer season, all deer had to be brought to a check station; therefore, age data collected during the opening weekend of Firearms Season provided an unbiased method for determining the age structure of the harvest. All hunters had to check in deer online during the 2015-2016 season; therefore age estimates of adult deer, such as the proportion of yearling bucks in the harvest, became unreliable. Evaluation of the on-line check-in data for the opening weekend of the Firearms Season historically showed that hunters were more likely to report antlered bucks at check stations than online, but were more likely to report button bucks online than at check stations, thus biasing estimates toward an older age structure than the actual harvest.

Therefore, we are unable to provide age class estimates of adult deer and will be unable to do so until we obtain a valid, scientific method for correcting this bias.



Table 5. Sex and age structure of the Indiana deer harvest 1987-2015, as determined from check stations and online registration.

Year	Adults		Fawns		Total
	Males (%)	Females (%)	Males (%)	Females (%)	
1987	29,530 (57)	11,139 (21)	6,164 (12)	4,945 (10)	51,778
1988	34,358 (57)	13,170 (22)	7,050 (12)	5,656 (10)	60,234
1989	40,503 (51)	19,464 (24)	10,737 (14)	8,614 (11)	79,318
1990	43,080 (48)	23,680 (27)	12,373 (14)	9,630 (11)	88,763
1991	41,593 (42)	31,211 (32)	14,626 (15)	11,253 (11)	98,683
1992	43,508 (46)	25,387 (27)	14,262 (15)	12,157 (13)*	95,314
1993	44,424 (44)	27,704 (27)	14,751 (15)	14,335 (14)*	101,214
1994	50,812 (45)	32,466 (29)	15,487 (14)	13,651 (12)*	112,416
1995	47,098 (40)	40,946 (35)	16,398 (14)	13,287 (11)*	117,729
1996	47,315 (38)	39,913 (32)	17,307 (14)	18,551 (15)*	123,086
1997	42,537 (41)	35,163 (34)	14,039 (13)	13,198 (12)*	104,937
1998	44,955 (45)	30,711 (31)	12,257 (12)	12,538 (12)*	100,461
1999	46,371 (46)	30,474 (31)	11,645 (12)	11,129 (11)*	99,618
2000	44,621 (45)	31,986 (32)	11,072 (11)	11,046 (11)*	98,725
2001	48,357 (47)	31,806 (31)	11,230 (11)	11,770 (11)*	103,163
2002	47,177 (45)	35,357 (34)	11,291 (11)	10,603 (10)*	104,428
2003	49,533 (46)	36,303 (34)	10,262 (10)	10,887 (10)*	106,986
2004	54,743 (44)	41,749 (34)	12,501 (10)	14,065 (11)*	123,058
2005	52,488 (42)	44,286 (35)	13,030 (10)	15,722 (13)*	125,526
2006	49,097 (39)	45,257 (36)	13,688 (11)	17,339 (14)*	125,381
2007	49,375 (40)	44,514 (36)	13,313 (11)	17,225 (14)*	124,427
2008	50,845 (39)	46,666 (36)	13,083 (11)	19,154 (15)*	129,748
2009	52,878 (40)	48,222 (36)	13,040 (10)	18,291 (14)*	132,431
2010	53,007 (40)	49,911 (37)	13,367 (10)	17,719 (13)*	134,004
2011	50,717 (39)	45,931 (36)	13,058 (10)	19,312 (15)*	129,018
2012	45,936† (34)	54,983 (40)	15,911 (12)	19,418 (14)*	136,248
2013	46,240† (37)	46,229 (37)	14,100 (11)	19,066 (15)*	125,635
2014	45,686† (38)	46,760 (39)	12,694 (11)	14,933 (12)*	120,073
2015	50,475† (41)	60,547(49)	12,642(10)	€	123,664

*The number of adult and fawn females is projected from the % fawns of all females aged at the biological check stations, not from the ratio of fawn doe to fawn bucks in the total deer harvest.

€ Due to the lack of biological check stations and implementation of 100% online check in of all harvested deer in 2015, female fawn numbers are not available.

† Includes shed antlered bucks

DEER LICENSE SALES

The number of deer licenses sold in 2015 decreased by 12% from 2014 (Table 6). The number of privileges (number of deer legally allowed to be harvested) was nearly identical to 2014, with a slight increase of 697 privileges or less than 1%. Each deer license bundle includes three deer privileges.

Table 6. Deer license sales in Indiana by type, 2011-2015*.

License Type Sold	2011	2012	2013	2014	2015
Resident Deer License Bundle	n/a	56,606	59,546	62,092	65,604
Resident Archery/Crossbow/Urban	60,844	33,428	32,669	31,108	29,261
Resident Firearm	103,284	57,092	52,175	47,158	43,995
Resident Muzzleloader	23,956	7,883	6,450	6,641	6,088
Resident Military/Refuge	3,138	1,413	1,116	1,352	1,276
Resident Bonus Antlerless	73,287	32,403	27,993	24,241	21,088
Nonresident	11,889	10,717	10,626	10,937	16,440
Youth	39,030	39,389	41,137	39,298	32,810
Total Licenses (Excluding Youth)	276,398	199,542	190,575	183,529	161,904
Total Privileges (Excluding Youth)**	276,398	316,858	314,881	313,235	313,932
*Total numbers subject to change slightly via refunds or voids					
** Includes additional privileges from nonresident bundle licenses					

DISTRIBUTION OF THE HARVEST

The number of deer harvested in individual counties ranged from 90 in Benton County to 3,227 in Harrison County (Table 7). Harvest exceeded 1,000 deer in 58 counties; 2,000 deer in 17 counties; and 3,000 deer in one county. The antlered buck harvest exceeded 1,000 in 7 counties (an increase of 6 from 2014), while the antlerless harvest exceeded 1,000 deer in 28 counties, compared with 27 the previous year. Antlerless deer accounted for at least 50% of the total harvest in 89 (97%) of the state's 92 counties in 2015. The ten counties with the greatest harvests were, in descending order, Harrison, Washington, Franklin, Switzerland, Noble, Dearborn, Steuben, Lawrence, Parke, and Crawford. The ten counties with the lowest harvests, in ascending order, were Benton, Tipton, Blackford, Hancock, Clinton, Howard, Rush, Wells, Boone, and Marion.



Table 7. Number of deer harvested in each Indiana county during 2015 (after adjustment for unknowns).

County	Number Harvested			County	Number Harvested		
	Antlered†	Antlerless	Total		Antlered†	Antlerless	Total
Adams	224	325	549	Lawrence	989	1513	2,502
Allen	629	1052	1,681	Madison	199	327	526
Bartholomew	471	693	1,164	Marion	113	320	433
Benton	59	31	90	Marshall	796	1163	1,959
Blackford	130	180	310	Martin	575	910	1,485
Boone	156	270	426	Miami	513	682	1,195
Brown	675	1082	1,757	Monroe	713	986	1,699
Carroll	328	50	828	Montgomery	418	628	1,046
Cass	511	650	1,161	Morgan	536	780	1,316
Clark	756	1202	1,958	Newton	371	379	750
Clay	490	675	1,165	Noble	976	1648	2,624
Clinton	152	184	336	Ohio	374	436	810
Crawford	943	1427	2,370	Orange	1002	1318	2,320
Daviess	397	576	973	Owen	686	1031	1,717
Dearborn	1073	1486	2,559	Parke	869	1521	2,390
Decatur	337	435	772	Perry	875	1070	1,945
DeKalb	832	1144	1,976	Pike	688	844	1,532
Delaware	306	466	772	Porter	518	991	1,509
Dubois	795	1245	2,040	Posey	551	636	1,187
Elkhart	501	807	1,308	Pulaski	732	1100	1,832
Fayette	448	642	1,090	Putnam	761	1009	1,770
Floyd	335	486	821	Randolph	291	356	647
Fountain	518	725	1,243	Ripley	749	1248	1,997
Franklin	1098	1792	2,890	Rush	176	209	385
Fulton	630	871	1,501	Saint Joseph	456	676	1,132
Gibson	529	733	1,262	Scott	438	688	1,126
Grant	314	495	809	Shelby	204	253	457
Greene	977	1227	2,204	Spencer	572	751	1,323
Hamilton	180	349	529	Starke	592	930	1,522
Hancock	135	185	320	Steuben	1089	1434	2,523
Harrison	1296	1931	3,227	Sullivan	777	939	1,716
Hendricks	249	378	627	Switzerland	1065	1588	2,653
Henry	273	328	601	Tippecanoe	365	547	912
Howard	145	233	378	Tipton	65	49	114
Huntington	391	500	891	Union	270	351	621
Jackson	898	1263	2,161	Vanderburgh	289	612	901
Jasper	576	735	1,311	Vermillion	502	591	1,093
Jay	370	614	984	Vigo	640	919	1,559
Jefferson	933	1391	2,324	Wabash	598	731	1,329
Jennings	828	1335	2,163	Warren	450	664	1,114
Johnson	266	371	637	Warrick	686	718	1,404
Knox	401	474	875	Washington	1108	1783	2,891
Kosciusko	882	1342	2,224	Wayne	495	634	1,129
LaGrange	786	1177	1,963	Wells	211	177	388
Lake	507	794	1,301	White	386	549	935
LaPorte	758	958	1,716	Whitley	452	547	999

* Totals may be off ±1 due to rounding during partitioning of harvested deer of unknown sex or county.

† Includes shed antlered bucks.

DISEASE MONITORING

Epizootic Hemorrhagic Disease

Epizootic Hemorrhagic Disease (EHD) is caused by the epizootic hemorrhagic disease viruses (EDHV) and is spread to deer through biting midges. The virus is not contagious and deer that contract the disease do not always die. EDHV can be present in the blood for up to two months and incubation in deer is five to ten days. There are three forms of the disease, chronic, peracute and acute. Deer with the chronic form may be ill and recover, while deer with peracute and acute forms often die within eight to 36 hours of symptoms. The severity of the disease varies from year to year and with geographic location. The variability of the disease is affected by many environmental factors, including the number of insect vectors, the virus serotype, previous host immunity, and overall host genetics and deer population density. Deer that survive develop antibodies. In 2015, DNR confirmed EHDV-2 in wild deer in three counties (Hendricks, Tippecanoe and Montgomery) and collected reports of suspect cases in a total of 27 counties scattered across the state. The Board of Animal Health also confirmed EHD in captive herds in 2015. The last major outbreak of EHD occurred in 2012, with a less widespread, but significant outbreak in 2013.

Chronic Wasting Disease

Chronic Wasting Disease (CWD) is one of a group of diseases called Transmissible Spongiform Encephalopathies. The infectious agents of CWD are prions, which are abnormal versions of normal cellular proteins, which are synthesized in the central nervous system and lymphoid tissues. Prions that cause CWD are highly resistant to heat or disinfectant. The disease is always fatal and there is no cure, vaccine or treatment for CWD. The disease attacks the central nervous system and causes behavioral changes, excessive salivation and loss of appetite. These symptoms lead to progressive loss of body condition and death. CWD has a long incubation period that averages 18 to 24 months between infection and symptoms. Infected animals appear healthy in the early stages of the disease. In advanced stages, however, they become emaciated, may lose fear of humans, stand with legs wide apart, and hold head and ears low. CWD spreads through saliva and feces of infected deer. Recent research has found that the prions can be taken up by plants. It is not known if the prion-contaminated plant materials are transmissible upon ingestion of plant parts, however prion-tainted plants were found to be infectious when injected into small mammals. There is currently no verifiable evidence that CWD is transmissible to humans. Additional research is being conducted to determine how the disease is transmitted among deer and elk, what role infected deer carcasses play in CWD trans-



mission, how artificial feeding affects transmission and whether small mammals play a role in transmission.

As of March 2016, 23 states have confirmed CWD. It has continued to spread geographically and become locally prevalent. Arkansas, Texas, Wyoming, Nebraska, Iowa, and Wisconsin have reported new cases in February and March 2016.

Indiana has an active surveillance program that includes randomly sampling tissues (obex or retropharyngeal lymph glands) from hunter-harvested deer throughout the state (active surveillance) carcasses of noticeably sick deer (targeted surveillance) and tissue samples from random road-killed deer.

The DNR Division of Fish & Wildlife personnel collected 363 CWD samples in 2015 through active and targeted surveillance efforts. Test results were negative for all samples. As of March 2016, no CWD prions have been detected in more than 18,000 sampled deer since monitoring began in 2002. For additional information on CWD please visit the USGS National Wildlife Health Center at http://www.nwhc.usgs.gov/disease_information/chronic_wasting_disease/index.jsp

Bovine Tuberculosis

Since 2009, the DNR Division of Fish & Wildlife, in partnership with the Indiana Board of Animal Health and the United States Department of Agriculture, has engaged in monitoring efforts to identify Bovine Tuberculosis (bTB) in free-ranging white-tailed deer in southeastern Indiana. As of 2015, more than 1,300 deer were sampled from Franklin, Dearborn, and Ripley counties. All test results were negative for bTB. Since monitoring began in 2009, Indiana has tested more than 1,320 deer and has not detected bTB in the free ranging herd. Surveillance goals were met for both bTB zones; therefore the bTB surveillance program for the sites in southeastern Indiana is complete. Based on detection probabilities, it is unlikely that bTB was endemic to the wild deer herd, and it is unlikely that bTB moved from the captive cervid herds to the wild cervid populations.